SAM Stakeholders Meeting

Adam Lyon 23 March 2006

Purpose

- Awareness of short term goals
- Bring requests
- Discuss priorities

- ◆ Stakeholders
 - ❖ Experiments: CDF, DØ, MINOS
 - CD interests: OSG, the future

The people power

- ◆ 100%: Andrew, Parag, Steve Sherwood
- ◆ 50%: Randolph, Steve White, Robert Illingworth, Dehong, Krzysztof, myself
- ◆ 20% Gabriele

Effort	FTE
Core Development	2.5
Deployment to Production	1.3
Operational Support	1.0
Project Management	0.5
Outreach	0.5
Total	5.8

Continue smooth operations

- ◆ Expert support of SAM DH and SAMGrid
- ◆ Top priority task if we fail here, the project fails
- ♦ But can be major disruptions unplanned
- Why does SAM still require expert support (why do we still find bugs)?
 - While our testing is improving, we cannot reproduce the production environment
 - Introduction of multithreading adds complications we are still learning how to handle
 - Limited ad hoc monitoring
 - Installation/configuration were designed to be flexible, not easy
 - ❖ CDF and DØ have different load levels and usage patterns. They exercise the code differently. They hit different problems.

... continue smooth operations

- Anecdotal evidence that our steady state operations load is decreasing
 - ❖ SAM still functions, even with the loss of major players (Sinisa, Lauri, Valeria to their credit)
 - While the support load is large, we are still able to get SAM tasks completed
 - ❖ Some recent, though rocky success in DB server stability
 - ❖ I am requesting more resources to help with DB server understanding
- Everyone works on operations
 - ❖ SAM Station+FSS/C++ API: Andrew
 - ❖ SAMGrid: Andrew, Parag, future DØ "camper"
 - ❖ DB server: Steve W, Randolph
 - Python client: Robert, Steve S.
 - ❖ DØ: Robert, future Dehong; CDF: Dehong, Randolph

Near term tasks

- ♦ Upgrade to Python 2.4
 - Client already there
 - Problems with DB Server
- ♦ DØ Upgrade to v7
 - SAMGrid, Online, MC Generation, Users
- Complete deployment at CDF
 - Automated job restart, "sam get dataset"
- MIS
 - New monitoring system long time in the making
 - Now testing at the multi-server level
 - DB retention policy
 - ❖ SAM HDTV is already working

... Near term tasks

- ◆ SQLBuilder
 - * Replacement for unmaintainable dimensions parser
 - Needed by experiments for enhanced queries
- ◆ Improve testing capabilities and documentation
 - We have good tests of the DB server
 - But we need specific client tests,
 - Testing of autodestination
 - SAM station tests
- ◆ Testing for Oracle 10g

Longer term

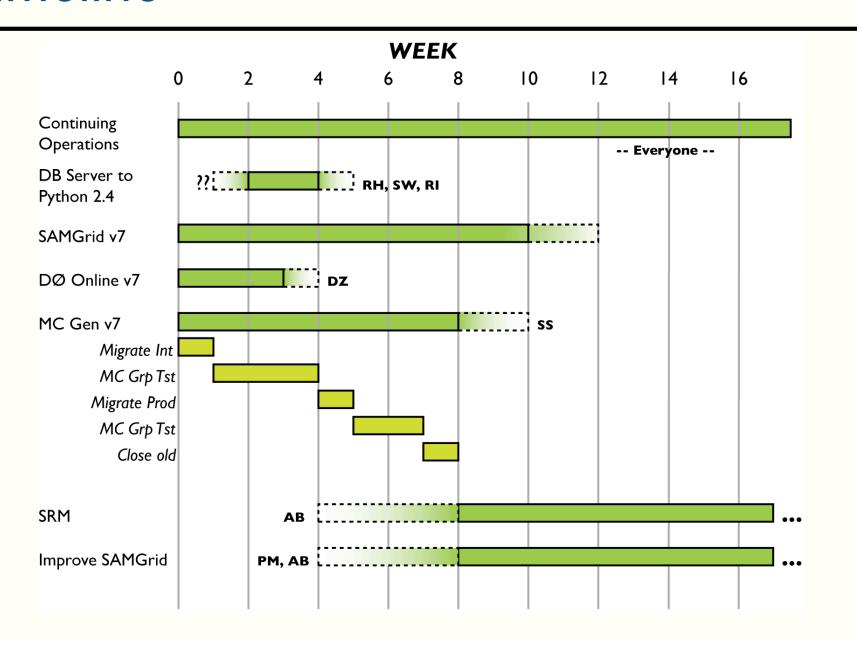
- ◆ Improved monitoring (cache metrics)
 - Make use of MIS
- Improved SAMGrid performance, deployment, stability
- **♦** SRM interface
 - Essential for access to dCache and for running on the Grid (LCG, OSG, glide ins)

Longest term

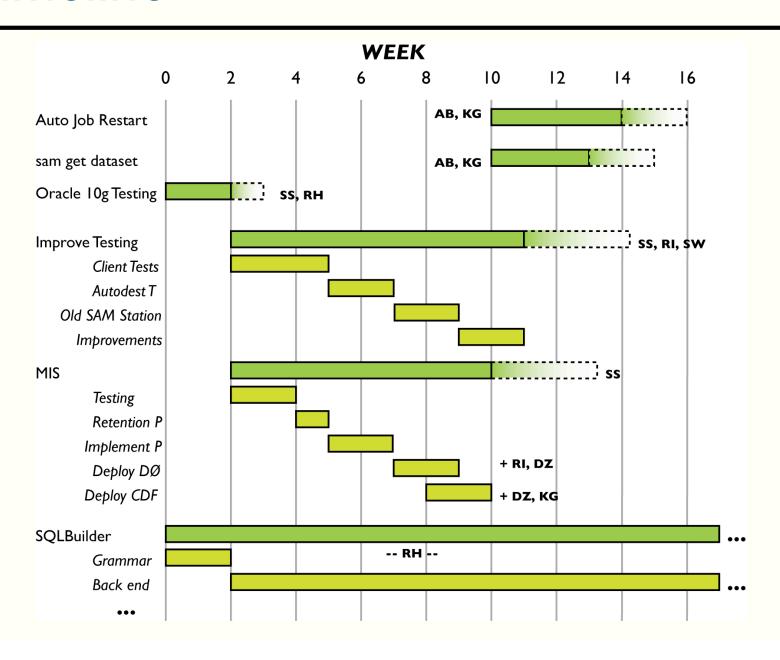
◆ SAMGrid for analysis jobs

◆ Breakup of SAM into individual service

Timeline



... timeline



Priorities of near term tasks

- I. Operations support [if we do not support our products, we fail]
- 2. Upgrade to Python 2.4 & Oracle 10g [known problems with Python 2.1, the upgrade to Oracle 10g is mandatory]
- 3. DØ v7 upgrade; Improved testing/docs
 [Without these, SAM can still function, but experiments will suffer, we will lose already invested work, and our operations will not decrease]
- 4. Automated job restart; "sam get dataset"; MIS, SQLBuilder

[SAM will continue to function without these, but at perhaps a compromised level and not meeting experiments requirements; lose already invested time and work]

Future priorities

- Improved monitoring, SAMGrid performance/deployment/stability [SAMGrid can function without these tasks, but at a higher operations level]
- 2. SRM Interface

[SAM works now without SRM interface, but as the Grid becomes more prevalent, experiments will need to find an alternative to SAM to make use of storage elements; CDF will remain with the ad hoc dCache station]

- 3. SAMGrid for analysis [DØ will need to find an alternate to SAMGrid for running user jobs on the Grid]
- 4. Break up SAM into services [SAMGrid development stops]

Risks and contingencies

- Unplanned tasks appearing
 - * Refer to GDM for evaluation and approval
- ♦ If a task gets into trouble, a persons from a lower priority task could help (but reality is that people are too pigeon holed)
- ♦ If a drastic cut needs to be made, the most vulnerable near term tasks are MIS and SQLBuilder. Could forgo some testing, but operations would not decrease
- The future of SAMGrid is also vulnerable.
 - SRM is essential for DØ and CDF to fully utilize the Grid
 - SAMGrid for analysis may be up for debate
 - Breaking up SAM depends on how far we want to take the project and the position the CD desires to have in the Grid world.